

Notice of Allowability

Application No.

10/535,094

Examiner

Thomas H. Parsons

Applicant(s)

YOSHIDA ET AL.

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 19 DEcember 2007.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

Response to Amendment

This is in response to the Amendment filed 19 December 2007.

(Previous) DETAILED ACTION

Specification

1. The objection to the disclosure because of minor informalities has been **withdrawn** in view of Applicants' Amendment.

Claim Rejections - 35 USC § 102

2. The rejection of claims 1-3 under 35 U.S.C. 102(b) as being anticipated by JP2001-307758 has been **withdrawn** in view of Applicants' Amendment.

Claim Rejections - 35 USC § 103

3. The rejection of claims 4-9 and 14-18 under 35 U.S.C. 103(a) as being unpatentable over JP'758 as applied to claim 1 above has been **withdrawn** in view of Applicants' Amendment.
4. The rejection of claim 10 under 35 U.S.C. 103(a) as being unpatentable over JP2001-307758 as applied to claim 1 above, and further in view of Scheffler et al. (US 6,393,354).
5. The rejection of claims 11 and 12 under 35 U.S.C. 103(a) as being unpatentable over JP2001-307758 in view of Scheffler et al. (US 6393,354) has been **withdrawn** in view of Applicants' Amendment.

Response to Arguments

6. Applicant's arguments, see page 10, paragraph I through page 13, end of paragraph IV, filed 19 December 2007, with respect to claims 1-18 have been fully considered and are persuasive. The rejection of the claims has been withdrawn.

REASONS FOR ALLOWANCE

7. The following is an examiner's statement of reasons for allowance:

The invention of Independent claims 1 and 11 are directed, in part, towards a non-generation-time control portion that is configured to stop a generation control performed by the generation control portion if the requested electric power is lower than or equal to a predetermined value, and is configured to operate at least one of the oxygen supplier portion and the hydrogen supplier portion based on a predetermined condition regardless of the requested electric power. Manabe fails to disclose or suggest these features.

Manabe discloses a fuel cell-equipped electric vehicle that uses a secondary battery 30 in addition to a fuel cell 20 (see Abstract). Both the fuel cell 20 and the secondary battery 30 are used to supply power to an electric motor 32 provided as a drive power source during a normal condition (see paragraphs [0005], [0006], [0012]-[0014] and [0017]-[0033]). Manabe teaches that during an operating state where the power generation efficiency of the fuel cell 20 becomes low, power generation of the fuel cell 20 is stopped and the electric motor 32 is driven via only the secondary battery 30 (see, e.g., paragraphs [0005], [0006] and [0012]-[0014]). Nowhere does Manabe disclose or suggest a non-generation-time control portion configured to stop a generation control performed by the generation control portion if the requested electric power is

lower than or equal to a predetermined value, and configured to operate at least one of the oxygen supplier portion and the hydrogen supplier portion based on a predetermined condition regardless of the requested electric power.

The invention of Independent claim 13 is directed, in part, operating at least one of the oxygen supplier portion and the hydrogen supplier portion based on a predetermined condition regardless of the requested electric power after the electric power generation is stopped. Manabe fails to disclose or suggest such an operating feature.

Manabe teaches that during an operating state where the power generation efficiency of the fuel cell 20 becomes low, power generation of the fuel cell 20 is stopped and the electric motor 32 of the car is driven via only the secondary battery 30 (see, e.g., Abstract and paragraphs [0005], [0006], [0012] and [0013]). That is, during this period, Manabe teaches that operation of fuel cell auxiliary machinery (which includes an oxygen supplier and a hydrogen supplier) is suspended to further save energy used to operate the fuel cell auxiliary machinery (see paragraph [0014]). Performing these procedures with at least one of an oxygen supplier portion and a hydrogen supplier portion after electric power generation is stopped is contrary to the teachings of Manabe, and thus would not have been obvious to one skilled in the art in view of Manabe.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H. Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thomas H Parsons
Examiner
Art Unit 1795


THOMAS H. PARSONS
SUPERVISOR, ART UNIT 1795